

CHANGE ISSUE – RTCA/DO-242

MASPS for ADS-B

Rev. A

Tracking Information (committee secretary only)	
Change Issue Number	65
Submission Date	2/22/02
Status (open/closed/deferred)	DEFERRED
Last Action Date	3/4/02

Short Title for Change Issue:	If both barometric and geometric altitude are being broadcast, updating both at the State Vector rate should not be required.
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MASPS Document Reference:		Originator Information:	
Entire document (y/n)		Name	Stuart Searight, FAA Tech. Center
Section number(s)	3.4.3.6, 3.4.3.13	Phone	(609) 485-5036
Paragraph number(s)		E-mail	Stuart.Searight@tc.faa.gov
Table/Figure number(s)	Table 3.4.3	Other	

Proposed Rationale for Consideration (originator should check all that apply):	
<input type="checkbox"/>	Item needed to support of near-term MASPS/MOPS development
<input type="checkbox"/>	DO-260/ED-102 1090 MHz Link MOPS Rev A
<input type="checkbox"/>	ASA MASPS
<input type="checkbox"/>	TIS-B MASPS
<input checked="" type="checkbox"/>	UAT MOPS
<input type="checkbox"/>	Item needed to support applications that have well defined concept of operation
<input type="checkbox"/>	Has complete application description
<input type="checkbox"/>	Has initial validation via operational test/evaluation
<input type="checkbox"/>	Has supporting analysis, if candidate stressing application
<input type="checkbox"/>	Item needed for harmonization with international requirements
<input checked="" type="checkbox"/>	Item identified during recent ADS-B development activities and operational evaluations
<input type="checkbox"/>	MASPS clarifications and correction item
<input checked="" type="checkbox"/>	Validation/modification of questioned MASPS requirement item
<input type="checkbox"/>	Military use provision item
<input type="checkbox"/>	New requirement item (must be associated with traffic surveillance to support ASAS)

Nature of Issue:	<input type="checkbox"/> Editorial	<input type="checkbox"/> Clarity	<input checked="" type="checkbox"/> Performance	<input type="checkbox"/> Functional
<u>Issue Description:</u> Currently both barometric and geometric altitude are required to be updated at State Vector rates if they are available. If an ADS-B system is transmitting a “primary” altitude from one source at SV rate, there should be a relaxation on the required update rate of the “secondary” altitude.				

<u>Originator’s proposed resolution:</u> Allow for a relaxation in the rate of one altitude if altitude from both barometric and geometric sources are being broadcast.
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Working Group 6 Deliberations:

February 22, 2002: This Issue Paper was created to document this issue as it was discussed by WG6 at their February 2002 meeting. While the paper itself was not directly reviewed by WG6 at the meeting, it does reflect the minuted discussions on this topic. The request for the relaxation of the update rate of the “secondary” altitude was made by WG5 during a telecon at which intent information requirements were being discussed. While initially WG6 felt this was a reasonable request, further examination of this issue left some unanswered questions. First, validation would be needed to determine exactly what the lower rate of the “secondary” altitude could be. Second, it was realized that under certain circumstances geometric altitude will need to be required as the “primary” altitude, and under other circumstances barometric altitude will need to be required as the “primary” altitude. It is believed by WG6 these requirements could be developed without a major effort, but due to time constraints on the completion of revision A, this effort will need to be deferred to a future revision of the MASPS. However, a note was created for the State Vector Report Definition table in §3.4.3 documenting the probable resolution of this issue paper in a future MASPS version.

Working Group 6 Final Resolution:

While the actual relaxation of the update requirements on the “secondary” altitude is deferred to a future MASPS revision, the following note was added to the State Vector Report Definition table in § 3.4.3 in the draft DO-242A sent to RTCA on March 4, 2002:

4. *Future revisions of this MASPS may not require that both geometric and pressure altitudes – if available – to be broadcast at the SV rate. Conditions will need to be specified as to when each altitude must be the “primary” altitude being sent at the SV rate.*